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| 10/062,207 | 01/31/2002 | Serguei A. Glazko | 010251 | 9894 |

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EXAMINER

PHAN, HUY Q

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2685

DATE MAILED: 08/03/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/062,207

Applicant(s)

GLAZKO ET AL.

Examiner

Huy Q Phan

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanghi (US-2002/0111169).

Regarding claim 1, Vanghi discloses in figures 1 to 5, a method comprising: starting a timer defined for use within a first wireless communication system ([0055]-[0057]). But, Vanghi fails to expressly show estimating a duration of a transition from the first wireless communication system to a second wireless communication system as a function of the timer. However, Vanghi teaches that "other processing" may be performed at the end of the timer [0057]; then it would have been obvious to one of ordinary skill in the art to apply "other processing" as the transition from one system to another system for purpose of reconnecting the communication between the user to other system when the communication between the user and the existing system being expired.

It is considered estimating a duration of a transition as permissible suspension time which is required for the transition from one system to other system in order to increase well-ordered transition-related task in manipulating other system.

Regarding claim 2, Vanghi discloses a method as recited in the rejection of claim 1, further comprising performing a pre-defined operation associated with the timer ([0055]-[0057]).

Regarding claim 3, Vanghi discloses a method as recited in the rejection of claim 2, wherein the operation is pre-defined by the first wireless communication system ([0033]-[0035]).

Regarding claim 4, Vanghi discloses a method as recited in the rejection of claim 1, wherein the timer comprises a supervision timer ([0033]-[0035]).

Regarding claim 5, Vanghi discloses a method as recited in the rejection of claim 1, wherein the timer is defined by the IS856 wireless communication standard ([0033]-[0035]).

Regarding claim 6, Vanghi discloses a method as recited in the rejection of claim 1, further comprising: starting a plurality of timers (fig. 2, AT 1 - AT N) defined for use within the first wireless communication system (22) ([0033]-[0035]).

But, Vanghi does not particularly show when returning to the first wireless communication system, estimating the duration of the transition as a function of the plurality of timers. However, Vanghi teaches that one timer is used to estimate the

duration of the transition to another system; then it would have been obvious to one of ordinary skill in the art to apply more than one timer in order to increase accuracy and reliability.

Regarding claim 7, Vanghi discloses a method as recited in the rejection of claim 1, wherein the first wireless communication system is an IS856 system and the second wireless communication system is an IS2000-1x system (fig. 1 and [0055]-[0057]).

Regarding claim 8, Vanghi discloses a method as recited in the rejection of claim 7, wherein the supervision timer comprises an IS856 Control Channel Supervision Timer ([0030]-[0033]).

Regarding claim 9, Vanghi discloses a method as recited in the rejection of claim 8, further comprising:

attempting to receive a synchronous control channel capsule (inherently to control channel packets [0027]-[0031] and see Eyuboglu et al. US-2003/0026240 [0021]); and

transitioning to a network acquisition state when the attempt to receive the synchronous control channel capsule is unsuccessful ([0033]).

Regarding claim 10, Vanghi discloses a method as recited in the rejection of claim 7, wherein the supervision timer comprises a data rate control (DRC) supervision

timer ([0027]-[0031]), the method further comprising: starting a combination timer (fig. 6, box 240 and [0059]); and when returning to the IS856 system, estimating the duration of the transition as a function of the DRC supervision timer and the combination timer (figs. 4-6, box 240 and [0059]).

Regarding claim 11, Vanghi discloses a method as recited in the rejection of claim 10, further comprising:

restarting a transmitter in response to expiration of the DRC supervision timer (fig. 5, boxes 214-218); and

transitioning to an inactive state in response to expiration of the combination timer ([0055]-[0057]).

Regarding claim 12, Vanghi discloses figures 1 and 5, a system comprising steps: starting a timer defined for use within a first wireless communication system ([0055]-[0057]).

But, Vanghi fails to expressly show estimating a duration of a transition from the first wireless communication system to a second wireless communication system as a function of the timer. However, Vanghi teaches that "other processing" may be performed at the end of the timer [0057]; then it would have been obvious to one of ordinary skill in the art to apply "other processing" as the transition from one system to another system for purpose of reconnecting the communication between the user to other system when the communication between the user and the existing system being

expired. It is considered estimating a duration of a transition as permissible suspension time which is required for the transition from one system to other system in order to increase well-ordered transition-related task in manipulating other system. Vanghi does not particularly disclose a processor-readable medium containing processor executable instructions for said steps. However, the examiner takes official notice that it is well known in the art to perform any method, which contains any steps by implementing the processor-readable medium containing processor executable instructions. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Vanghi by specifically having a processor-readable medium containing processor executable instructions for performing said steps in order to improve the speed, accuracy, quality, reliability and cost of the communication system.

Regarding claim 13, Vanghi discloses a system as recited in the rejection of claim 12, further comprising performing a pre-defined operation associated with the timer ([0055]-[0057]).

Regarding claim 14, Vanghi discloses a system as recited in the rejection of claim 13, wherein the operation is pre-defined by the first wireless communication system ([0033]-[0035]).

Regarding claim 15, Vanghi discloses a system as recited in the rejection of

claim 12, wherein the timer comprises a supervision timer ([0033]-[0035]).

Regarding claim 16, Vanghi discloses a system as recited in the rejection of claim 12, wherein the timer is defined by the IS856 wireless communication standard ([0033]-[0035]).

Regarding claim 17, Vanghi discloses a system as recited in the rejection of claim 12, further comprising:

starting a plurality of timers (fig. 2, AT 1 - AT N) defined for use within the first wireless communication system (22) ([0033]-[0035]).

But, Vanghi does not particularly show when returning to the first wireless communication system, estimating the duration of the transition as a function of the plurality of timers. However, Vanghi teaches that one timer is used to estimate the duration of the transition to another system; then it would have been obvious to one of ordinary skill in the art to apply more than one timer in order to increase accuracy and reliability.

Regarding claim 18, Vanghi discloses a system as recited in the rejection of claim 12, wherein the first wireless communication system is an IS856 system and the second wireless communication system is an IS2000-1x system (fig. 1 and [0055]-[0057]).

Regarding claim 19, Vanghi discloses a system as recited in the rejection of claim 18, wherein the supervision timer comprises an IS856 Control Channel Supervision Timer ([0030]-[0033]).

Regarding claim 20, Vanghi discloses a system as recited in the rejection of claim 19, further comprising:

attempting to receive a synchronous control channel capsule (inherently to control channel packets [0027]-[0031] and see Eyuboglu et al. US-2003/0026240 [0021]); and

transitioning to a network acquisition state when the attempt to receive the synchronous control channel capsule is unsuccessful ([0033]).

Regarding claim 21, Vanghi discloses a system as recited in the rejection of claim 18, wherein the supervision timer comprises a data rate control (DRC) supervision timer ([0027]-[0031]), the method further comprising:

starting a combination timer (fig. 6, box 240 and [0059]); and

when returning to the IS856 system, estimating the duration of the transition as a function of the DRC supervision timer and the combination timer (figs. 4-6, box 240 and [0059]).

Regarding claim 22, Vanghi discloses a system as recited in the rejection of claim 21, further comprising:

restarting a transmitter in response to expiration of the DRC supervision timer (fig. 5, boxes 214-218); and
transitioning to an inactive state in response to expiration of the combination timer ([0055]-[0057]).

Regarding claim 23, Vanghi discloses in figures 1 to 5, a wireless communication device comprising: first wireless communication system hardware for operating in a first wireless communication system (fig. 1, box 22 and [0023]-[0026]); second wireless communication system hardware for operating in a second wireless communication system (fig. 1, box 28 and [0023]-[0026]); an interoperation module to configure the wireless communication device in response to a transition between the first and second wireless communication systems, the interoperation module configured to estimate a duration of the transition as a function of a supervision timer ([0063] and [0055]-[0057]).

Regarding claim 24, Vanghi discloses a wireless communication device as recited in the rejection of claim 23, wherein the interoperation module is configured to estimate the duration of the transition as a function of a plurality of supervision timers ([0030]-[0033]).

Regarding claim 25, Vanghi discloses a wireless communication device as recited in the rejection of claim 23, wherein the first wireless communication system is an IS856 system and the second wireless communication system is an IS2000-1x

system (fig. 1, boxes 22, 28 and [0023]-[0026]).

Regarding claim 26, Vanghi discloses a wireless communication device as recited in the rejection of claim 25, wherein the supervision timer is a Control Channel Supervision Timer ([0030]-[0033]).

Regarding claim 27, Vanghi discloses a wireless communication device as recited in the rejection of claim 26, wherein the interoperation module is configured to:
attempt to receive a synchronous control channel capsule (inherently to control channel packets [0027]-[0031] and see Eyuboglu et al. US-2003/0026240 [0021]); and
transition to a network acquisition state when the attempt to receive the synchronous control channel capsule is unsuccessful ([0027]-[0034]).

Regarding claim 28, Vanghi discloses a wireless communication device as recited in the rejection of claim 25, wherein the supervision timer is a data rate control (DRC) supervision timer, and wherein the interoperation module is configured to:
start a combination timer (fig. 6, box 240 and [0059]); and
when returning to the IS856 system, estimate the duration of the transition as a function of the DRC supervision timer and the combination timer (figs. 4-6, box 240 and [0059]).

Regarding claim 29, Vanghi discloses a wireless communication device as recited in the rejection of claim 28, wherein the interoperation module is configured to:

restart a transmitter in response to expiration of the DRC supervision timer (fig. 5, boxes 214-218); and

transition to an inactive state in response to expiration of the combination timer ([0055]-[0057]).

Regarding claim 30, Vanghi discloses an apparatus comprising: means for starting a timer defined for use within a first wireless communication system ([0055]-[0057]).

But, Vanghi fails to expressly show estimating a duration of a transition from the first wireless communication system to a second wireless communication system as a function of the timer. However, Vanghi teaches that "other processing" may be performed at the end of the timer [0057]; then it would have been obvious to one of ordinary skill in the art to apply "other processing" as the transition from one system to another system for purpose of reconnecting the communication between the user to other system when the communication between the user and the existing system being expired. It is considered estimating a duration of a transition as permissible suspension time which is required for the transition from one system to other system in order to increase well-ordered transition-related task in manipulating other system.

Regarding claim 31, Vanghi discloses an apparatus as recited in the rejection of

claim 30, further comprising means for performing a pre-defined operation associated with the timer ([0055]-[0057]).

Regarding claim 32, Vanghi discloses an apparatus as recited in the rejection of claim 31, wherein the operation is pre-defined by the first wireless communication system ([0033]-[0035]).

Regarding claim 33, Vanghi discloses an apparatus as recited in the rejection of claim 30, wherein the timer comprises a supervision timer ([0033]-[0035]).

Regarding claim 34, Vanghi discloses an apparatus as recited in the rejection of claim 30, wherein the timer is defined by the IS856 wireless communication standard ([0055]-[0057]).

Regarding claim 35, Vanghi discloses an apparatus as recited in the rejection of claim 34, further comprising:

means for starting a plurality of timers (fig. 2, AT 1 - AT N) defined for use within the first wireless communication system (22) ([0033]-[0035]).

But, Vanghi does not particularly show when returning to the first wireless communication system, estimating the duration of the transition as a function of the plurality of timers. However, Vanghi teaches that one timer is used to estimate the duration of the transition to another system; then it would have been obvious to one of

ordinary skill in the art to apply more than one timer in order to increase accuracy and reliability.

Regarding claim 36, Vanghi discloses an apparatus as recited in the rejection of claim 30, wherein the first wireless communication system is an IS856 system and the second wireless communication system is an IS2000-1x system (fig. 1 and [0055]-[0057]).

Regarding claim 37, Vanghi discloses an apparatus as recited in the rejection of claim 36, wherein the supervision timer comprises an IS856 Control Channel Supervision Timer ([0030]-[0033]).

Regarding claim 38, Vanghi discloses an apparatus as recited in the rejection of claim 37, further comprising:

means for attempting to receive a synchronous control channel capsule (inherently to control channel packets [0027]-[0031] and see Eyuboglu et al. US-2003/0026240 [0021]); and

means for transitioning to a network acquisition state when the attempt to receive the synchronous control channel capsule is unsuccessful ([0027]-[0034]).

Regarding claim 39, Vanghi discloses an apparatus as recited in the rejection of

claim 36, wherein the supervision timer comprises a data rate control (DRC) supervision timer ([0027]-[0031]), the apparatus further comprising:

means for starting a combination timer (fig. 6, box 240 and [0059]); and

means for estimating the duration of the transition as a function of the DRC supervision timer and the combination timer when returning to the IS856 system (figs. 4-6, box 240 and [0059]).

Regarding claim 40, Vanghi discloses an apparatus as recited in the rejection of claim 39, further comprising:

means for restarting a transmitter in response to expiration of the DRC supervision timer (fig. 5, boxes 214-218); and

means for transitioning to an inactive state in response to expiration of the combination timer ([0055]-[0057]).

3. Claims 41-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanghi in view of Newbury et al. (US-2002/0102976).

Regarding claim 41, Vanghi discloses a system comprising steps: starting a timer defined for use within a first wireless communication system ([0055]-[0057]).

But, Vanghi does not particularly show estimating a duration of a transition from the first wireless communication system to a second wireless communication system as a function of the timer. However, Vanghi teaches that "other processing" may be performed at the end of the timer [0057]; then it would have been obvious to one of

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ordinary skill in the art to apply "other processing" as the transition from one system to another system for purpose of reconnecting the communication between the user to other system when the communication between the user and the existing system being expired. It is considered estimating a duration of a transition as permissible suspension time which is required for the transition from one system to other system in order to increase well-ordered transition-related task in manipulating other system.

Vanghi fails to expressly teach a memory that stores processor-readable instructions; and a processor coupled to the memory that executes the instructions to operate said steps. However in analogous art, Newbury et al. teach a memory that stores processor-readable instructions (inherently to processing circuitry [0034]); and a processor coupled to the memory that executing the instructions (inherently to processing circuitry [0034]). Since, Vanghi and Newbury et al. are related to timing transitions between wireless communication system; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Vanghi by specifically having a memory that stores processor-readable instructions; and a processor coupled to the memory that executing the instructions as taught by Newbury et al. for purpose of computerizing the wireless communication system in order to improve the speed, accuracy, quality, reliability and cost of the wireless communication system.

Regarding claim 42, Vanghi and Newbury et al. disclose a system as recited in the rejection of claim 41. Vanghi further discloses the system wherein the processor

further executes the instructions to perform a pre-defined operation associated with the timer ([0055]-[0057]).

Regarding claim 43, Vanghi and Newbury et al. disclose a system as recited in the rejection of claim 42. Vanghi further discloses the system wherein the operation is pre-defined by the first wireless communication system ([0033]-[0035]).

Regarding claim 44, Vanghi and Newbury et al. disclose a system as recited in the rejection of claim 41. Vanghi further discloses the system wherein the timer comprises a supervision timer ([0033]-[0035]).

Regarding claim 45, Vanghi and Newbury et al. disclose a system as recited in the rejection of claim 41. Vanghi further discloses the system wherein the timer is defined by the IS856 wireless communication standard ([0055]-[0057]).

Regarding claim 46, Vanghi and Newbury et al. disclose a system as recited in the rejection of claim 41. Vanghi further discloses the system wherein the processor further executes the instructions to: start a plurality of timers (fig. 2, AT 1 - AT N) defined for use within the first wireless communication system (22) ([0033]-[0035]).

But, Vanghi does not particularly show when returning to the first wireless communication system, estimating the duration of the transition as a function of the plurality of timers. However, Vanghi teaches that one timer is used to estimate the

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duration of the transition to another system; then it would have been obvious to one of ordinary skill in the art to apply more than one timer in order to increase accuracy and reliability.

Regarding claim 47, Vanghi and Newbury et al. disclose a system as recited in the rejection of claim 41. Vanghi further discloses the system wherein the first wireless communication system is an IS856 system and the second wireless communication system is an IS2000-1x system (fig. 1 and [0055]-[0057]).

Regarding claim 48, Vanghi and Newbury et al. disclose a system as recited in the rejection of claim 47. Vanghi further discloses the system wherein the supervision timer comprises an IS856 Control Channel Supervision Timer ([0030]-[0033]).

Regarding claim 49, Vanghi and Newbury et al. disclose a system as recited in the rejection of claim 48. Vanghi further discloses the system wherein the processor further executes the instructions to:

attempt to receive a synchronous control channel capsule (inherently to control channel packets [0027]-[0031] and see Eyuboglu et al. US-2003/0026240 [0021]); and

transition to a network acquisition state when the attempt to receive the synchronous control channel capsule is unsuccessful ([0027]-[0034]).

Regarding claim 50, Vanghi and Newbury et al. disclose a system as recited in

the rejection of claim 47. Vanghi further discloses the system wherein the supervision timer comprises a data rate control (DRC) supervision timer ([0027]-[0031]), wherein the processor further executes the instructions to:

start a combination timer (fig. 6, box 240 and [0059]); and

estimate the duration of the transition as a function of the DRC supervision timer and the combination timer when returning to the IS856 system (figs. 4-6, box 240 and [0059]).

Regarding claim 51, Vanghi and Newbury et al. disclose a system as recited in the rejection of claim 50. Vanghi further discloses the system wherein the processor further executes the instructions to:

restart a transmitter in response to expiration of the DRC supervision timer (fig. 5, boxes 214-218); and

transition to an inactive state in response to expiration of the combination timer ([0055]-[0057]).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Broderick (US-5,995,829) discloses a programmable system in dual-mode wireless communication system.

Ward et al. (US-2002/0072389) disclose mobile earth terminal.

Eyuboglu et al. (US-2003/0026240) disclose a wireless communication system.

Yavuz et al. (US-2003/0123406) disclose data rate control.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 703-305-9007. The examiner can normally be reached on 8AM-5PM.

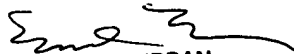
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Urban F Edward can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phan, Huy Q

Au: 2685

Date : Jul. 23, 2004


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600